## **RESOURCE REVIEWS**

Socrative (Snowy release). MasteryConnect, 222 South Main Street, Suite 200, Salt Lake City, UT 84101; 801.736.0258; support@socrative.com; <a href="http://www.socrative.com">http://www.socrative.com</a>; free website and apps.

It is under the purview of many librarians to teach library and information literacy concepts to students, researchers, and professionals alike. Those of us who provide this instruction often find ourselves facing similar issues, such as: How can we increase

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the engagement of our pupils, and how can we determine whether learning has actually taken place? Socrative is a free online assessment tool that allows instructors to administer in-class quizzes, view responses in real time, and generate reports to monitor and visualize student learning [1]. It, therefore, provides a means for carrying out pre-class testing so that instructors understand what students know prior to the session, as well as conduct formative and summative assessment. Formative assessment, which is employed continuously to monitor and improve teaching and learning, contrasts with summative assessment, which is used to evaluate student retention of subject matter [2]. The Socrative platform provides an additional tool for library instruction, beneficial to both teachers and students.

Teachers and students will utilize and view Socrative differently. As such, there are differences in how each group will log in. If you are an instructor, you must sign up for a teacher account, which can be linked to Google Drive if you provide a Gmail address. Upon creating an account, you

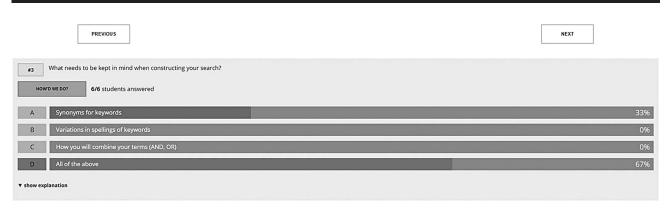


Figure 1 Live student results viewed from a teacher-paced quiz in Socrative

will be assigned a unique room code that students will use to identify your virtual classroom and gain access to your quizzes. You have the option to change this code after creating your account.

Socrative allows you to create customized quizzes that can include any combination of multiple choice, true or false, and shortanswer questions. Additional customization options include the ability to attach images to questions as well as add explanations of correct answers so that your students can have immediate feedback. Each quiz is given a unique SOC number, which you can share with colleagues. Using this SOC code, you can import preexisting quizzes into your virtual classrooms, allowing smooth collaboration with colleagues. The process of creating and reordering questions is very intuitive, and you should have no problems; however, should any questions arise, Socrative's website contains very helpful documentation.

Socrative has four different assessment options: (1) Start a Quiz, (2) Quick Question, (3) Space Race, and (4) Exit Ticket, with various pros and cons:

■ Start a Quiz allows you to administer a quiz that you have already created or imported, with the pace of questions controlled

either by the student or the instructor. There are two forms of student-paced quizzes in Socrative: The student-paced immediate feedback option gives learners instant feedback about which questions they answered correctly and which they got wrong as they work through the quiz, whereas the student-paced student navigation option allows learners to progress in a nonlinear fashion by skipping or returning to questions and modifying their answers. Teachers will see student answers populate a live results table as they occur. Conversely, teacher-paced quizzes allow you to control the delivery of questions and view live question-byquestion results that can be made viewable or hidden. I have found the ability to reveal results after everyone has answered provides an excellent opportunity to engage students in class discussions.

■ *Quick Question* provides you the opportunity to pose a true/false, multiple choice, or open-ended question to the class instantly and without prior preparation. This option is great for impromptu polls; for instance, you can ask students to identify gaps in their understanding of information literacy concepts or get a sense of their research topics of interest. The disadvantage of this option

lies in its spontaneous nature: you cannot provide a text explanation for multiple choice questions. The question and answer fields will appear blank, so students must remember which answer corresponds to which letter. This option is therefore best suited for asking open-ended questions or easily remembered true/false or multiple choice questions.

- Space Race allows groups of students to work through your quizzes in a race to answer the most questions correctly (Figure 1). Correct answers move an avatar forward and incorrect answers keep it in place. Teams are distinguished by color and can either be assigned randomly or selected by students. Unfortunately, the avatar graphics seem to be geared more toward a juvenile audience, including a rocket, bear, bicycle, bee, unicorn, or spaceship. However, I would argue that this activity is still valuable for librarian-educators in the professional world and in higher education, as it provides a unique way to encourage and assess group learning. ■ Exit Ticket comprises three fixed
- questions: one asks how well students understood the material, another requires students to explain what they learned in class, and a final open-ended question gives you the freedom to ask a

query of your choosing. It is meant to be administered at the end of a session as a means of formative assessment [3]. Exit Ticket provides you the opportunity to collect invaluable feedback from students. This information allows you to identify problem areas in student learning and address them via improvements to teaching methods going forward.

You may choose to employ one or more of these assessment methods, depending on your needs and the purpose of the session. What the methods all have in common is the ability for you to visualize student responses as they happen in real time. Unique to Starting a Quiz and Quick Question assessments is the ability to anonymize student names, which can be useful in situations where sensitive questions are posed and student privacy is a concern.

When guizzes are completed, you have the option to generate reports to email, save to Google Drive (if you provide a Gmail address at sign-up), or download as Excel or portable document format (PDF) files. Three different report types are available: (1) whole class Excel, (2) individual students' PDF files, and (3) question-specific PDF. Wholeclass summary tables include a color-coded, question-by-question breakdown of student responses; the percentage of students that correctly answered each question; and individuals' and mean class scores. Individual student reports provide a graded quiz for each person in the class, which can easily be returned to your students. These reports may not be as valuable for noncredit or one-shot library sessions but can provide insight into the strengths and weaknesses of individual students. You may find this information beneficial when providing

personalized or one-on-one research assistance. Lastly, question-specific reports include data for each question in a quiz, including the number of correct answers per question, those with the most and fewest correct answers, and students' full answers to open-ended questions. Reports generated by Socrative are easy to read and interpret, and provide assessment records so that you can chronicle teaching and learning over time.

Not all of Socrative's features will be useful for librarians in a medical or higher education setting, however. For instance, you have the option to categorize the questions you create using predefined tags, but these are limited to Common Core curricula subject matter. Furthermore, the juvenile avatar options available in the Space Race make it evident that this assessment platform was designed with K-12 students in mind. There is also a small learning curve for students who have not used Socrative before. Specifically, it does take a few minutes for students to log on to Socrative using the room code. Additionally, I have found that students often forget to select Submit Answer after making their choices on true/false and multiple choice questions, which can delay the class. The first issue can be remedied by simply changing the room code to a word that is easy to spell and remember; the second issue may require continuously reminding students to select Submit for their answers to go through. Though these matters may not seem a significant concern, you should nonetheless keep them in mind if you teach one-shot sessions, where time is especially valuable.

All things considered, Socrative is a user-friendly tool that allows librarian-educators to understand what students already know, as-

sess their learning as it happens, and collect feedback about the learning process itself. It allows increased student engagement in the classroom via group activities such as Space Race and discussions arising out of students' inclass answers. It provides an opportunity for everyone to contribute and participate in library sessions. Moreover, it offers instructors many ways to visualize and organize assessment—both in real-time and through post-assessment reports. In addition to the online interface, Socrative has made free apps for both teacher and student available for iOS and Android mobile devices, as well as for Google Chrome and Windows 8.1. The ability to use this tool across multiple devices such as laptops, phones, or tablets is very convenient both for librarians and students on the go. Overall, Socrative is very useful, and I would highly recommend its use for librarians involved in instruction who are looking for a means of assessing student learning as well as increasing classroom engagement.

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## **REFERENCES**

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DOI: http://dx.doi.org/10.3163/1536-

5050.103.4.020